20 JAN 2023

Reg. No.												

Question Paper Code	11654

B.E./B.Tech. - DEGREE EXAMINATIONS, NOV/DEC 2022

Fourth Semester

Computer Science and Engineering

20CSPC403 - OBJECT ORIENTED SOFTWARE ENGINEERING

(Regulations 2020)

Duration: 3 Hours | Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

		Marks, K-Level,CO
1.	Define Software engineering.	*2,K1,CO1*
2.	If you have developed a word processing software product, what process model will you choose justify your answer?	*2,K3,CO1*
3.	Classify the following Functional and Non-Functional Requirements for banking system a) Verifying bank balance b) Withdrawing money from bank c) Completion of transaction in less than one second d) Extending the system by providing more tellers for customers.	*2,K3,CO2*
4.	Define the term software architecture.	*2,K1,CO2*
5.	List the Relationship used in Use cases.	*2,K2,CO3*
6.	Differentiate Fork and Joint.	*2,K2,CO5*
7.	Distinguish between coupling and cohesion.	*2,K1,CO6*
8.	State the Use of Design Pattern.	*2,K1,CO6*
9.	Compare white box and black box testing.	*2,K2,CO5*
10.	What is refactoring?	*2,K1,CO4*

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

11.	a)	Neatly explain the water fall model and write their advantages and disadvantages.	*13,K2,CO1*
		OR	
	b)	What is agility? Explain in detail about Agile Process and principles.	*13,K1,CO1*
12.	a)	Describe the requirement validation and requirement management process in detail.	*13,K1,CO2*
		OR	
	b)	Explain about the various design concepts considered during design.	*13,K2,CO2*

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create

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13. a) What do you mean by Unified Process in OOAD? Explain the phases with suitable diagrams. *13,K1,CO3*

OR

b) When to Use Activity Diagram. Describe the situation with an example. *13,K1,CO3*

14. a) What is GRASP? Explain the design patterns and the principles used in it. *13,K1,CO6*

OR

b) What is design pattern? Explain the GoF design patterns. *13,K1,CO6*

15. a) What is black box testing? Explain the different types of black box testing strategies. Explainby considering suitable examples. *13,K1,CO5*

OR

b) List the phases in software re-engineering process model and explain each phase. *13,K1,CO4*

PART - C (1 × 15 = 15 Marks)

16. a) Explain the state chart diagram with a suitable example. Also define its components and use. *15,K4,CO5*

OR

b) Assume that you are technical manager of software development organization. A client approached you for a software solution. The problems stated by client have uncertainties which lead to loss if it is NOT planned and solved. Which software development model you will suggest for this project- Justify .Explain that model with its pros and cons and neat sketch. *15,K5,CO1*